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EXAMINER	
WANG, JACK K	

ART UNIT	PAPER NUMBER
4154	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/527,405	LEWIS, THOMAS JOHN	
	Examiner	Art Unit	
	Jack K. Wang	4154	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 February 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *25-55* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *25-55* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *11 March 2005* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2/10/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a) because they fail to show main capacitor 72 (Page 9 line 17) and light-emitting diode 82 (Page 9 line 21) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "socket outlet15" (Page 7 line 5) and "socket outlet 16" (Page 7 line 8) have both been used to designate socket outlet. Corrected drawing sheets in compliance with 37 CFR

1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "72" has been used to designate both timer circuit (Page 9 line 14) and main capacitor (Page 9 line 17). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: 70 Fig. 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any

amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

5. Claims 27 and 28 are objected to because of the following informalities: misuses of indefinite article, the term "a adaptor" has been interpreted as -- an adaptor -- for the art rejection below. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 25-26, and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Girismen (US Patent # 3,974,492).

Consider claim 25, Girismen clearly shown and discloses a self-contained electrical appliance alarm device for monitoring the electrical supply status of the electrical appliance, the device being connectable in the electrical supply line from the mains to the appliance (Abstract), wherein the device is operable to provide an audible and/or visible alarm (23, Fig. 3) signal if the electrical supply to the appliance is interrupted (an immediate reduction of the AC current

flow) after connection, and is operable in the absence of an internal power source or battery (Fig. 3) (Embodiment II).

Consider claim 26, Girismen clearly shown and disclose the self-contained alarm device, in which the device is operable to store energy (relay coil 26) from the mains when connected thereto and to use the stored energy to provide (de-energized) the alarm signal for a limited time after interruption of the mains electrical supply (Embodiment II).

Consider claim 30, Girismen clearly shown and disclose the self-contained alarm device, characterized in that there are provided means for detecting an open-circuit (switch opens) condition of a monitored supply line (Column 3 lines 43-49).

Consider claim 31, Girismen clearly shown and disclose the self-contained alarm device, characterized in that it includes a delay timer for delaying operation of an output device triggering the alarm indication for a pre-determined delay period after detection thereof (Column 3 lines 18-21).

Consider claim 32, Girismen clearly shown and disclose the self-contained alarm device, characterized in that said output device is a relay (21, Fig. 3).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492).

Consider claim 33, Girismen clearly shown and disclose the self-contained alarm device, characterized in that it has a capacitor (55, Fig. 5) which is maintained charged when the supply is present and which is arranged to discharge when the supply is removed. Although in the prefer embodiment Girismen shows the battery (52, Fig. 5) and capacitor (55, Fig. 5) as an alternative power source for an alarm, it would have been obvious to one of ordinary skill in the art at the time of the invention to use any well known equivalent energy storage device, wherein the selection of capacitor or battery is dependent on the particular application (Column 8 lines 51-57).

Consider claim 35, Girismen clearly shown and disclose the self-contained alarm device, characterized in that the said capacitor (55, Fig. 5) provides the power for an audible and/or visible alarm (42, Fig. 5) indicator upon the occurrence of an alarm condition.

10. Claims 27-29, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) as applied to claim 25 above, and further in view of Devries et al. (US Patent # 5,939,992).

Consider claims 27 and 28, Girismen teaches similar invention except the self-contained alarm device, characterized in that it is formed as an adaptor with pins for insertion into a socket and having socket connections for receiving the pins of a connector plug of the monitored appliance.

In the same field of endeavor, Devries et al. teaches the safety apparatus for electric appliance, characterized in that it is formed as a adaptor with pins for insertion into a socket and having socket connections for receiving the pins of a connector plug of the monitored appliance

(10, Fig. 1) for the benefit of user convenience, easy installation and retrofit to an older model appliances.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include an adapter with pins for insertion into a socket and having socket connections for receiving the pins of a connector plug of the monitored appliance as shown in Devries et al., in Girismen device for the benefit of user convenience, easy installation and retrofit to an older model appliances.

Consider claim 29, Girismen teaches similar invention except the self-contained alarm device, characterized in that it is incorporated into a plug for connection to a mains supply socket.

In the same field of endeavor, Devries et al. teaches the safety apparatus for electric appliance, characterized in that it is incorporated into a plug for connection to a mains supply socket (Column 2 lines 28-34) for the benefit of space saving with a reduction of wiring.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a plug for connection to a mains supply socket as shown in Devries et al., in Girismen device for the benefit of space saving with a reduction of wiring.

Consider claim 37, Girismen teaches similar invention except the self-contained alarm device, characterized in that the alarm indicator device is supplied intermittently when a power failure is detected, whereby to give the alarm indication.

In the same field of endeavor, Devries et al. teaches the self-contained alarm device, characterized in that the alarm indicator device is supplied intermittently (once per second) when a power failure is detected, whereby to give the alarm indication (Column 3 lines 27-30) for the

benefit of providing the intermittent signal is more noticeable by the human ear than a continuous signal.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the alarm indicator device is supplied intermittently when a power failure is detected, whereby to give the alarm indication as shown in Devries et al., in Girismen device for the benefit of providing the intermittent signal is more noticeable by the human ear than a continuous signal.

11. Claims 34,36, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) as applied to claim 25 above, and further in view of Ida (US Patent # 4,346,371).

Consider claim 34, Girismen teaches similar invention except the self-contained alarm device, characterized in that the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element.

In the same field of endeavor, Ida teaches the self-contained alarm device, characterized in that the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element (8, 18, 20, 22, 23, or 26, Fig. 1) (Column 1 lines 56-64) for the benefit of well know common fail-safe circuit design for an alarm.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element as shown in Ida, in Girismen device for the benefit of well know common fail-safe circuit design for an alarm.

Consider claim 36, Girisman clearly shown and disclose the self-contained alarm device, characterized in that the said capacitor (55, Fig. 5) provides the power for an audible and/or visible alarm (42, Fig. 5) indicator upon the occurrence of an alarm condition.

Consider claim 39, Girismen teaches similar invention except the self-contained alarm device, characterized in that a secondary output from the power supply is applied to the timer circuit to maintain it in a quiescent condition as long as the power is supplied to the circuit.

In the same field of endeavor, Ida teaches the self-contained alarm device, characterized in that a secondary output from the power supply is applied to the timer circuit (Column 2 lines 57-60) for the benefit of maintain the circuit in quiescent condition as long as the power is supplied to the circuit.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include an output from the power supply is applied to the timer circuit as shown in Ida, in Girismen device for the benefit of maintain the circuit in a quiescent condition as long as the power is supplied to the circuit.

12. Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) in view of Devries et al. (US Patent # 5,939,992) as applied to claim 37 above, and further in view of Goodchild (US Patent # 4,677,319 B1).

Consider claim 38, Girismen and Devries et al. combined reference teaches similar invention except the self-contained alarm device, characterized in that the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer.

In the same field of endeavor, Goodchild teaches the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer (Abstract) for the benefit of conserve the battery power.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include teaches the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer as shown in Goodchild, in Girismen and Devries et al. combined device for the benefit of conserve the battery power.

13. Claims 40-49, 51, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) in view of Devries et al. (US Patent # 5,939,992).

Consider claim 40, Girismen clearly shown and discloses a self-contained electrical appliance alarm device for monitoring the electrical supply status of the electrical appliance, the device being connectable in the electrical supply line from the mains to the appliance (Abstract), wherein the device is operable to provide an audible and/or visible alarm (23, Fig. 3) signal if the electrical supply to the appliance is interrupted (an immediate reduction of the AC current flow) after connection, and is operable in the absence of an internal power source or battery (Fig. 3) (Embodiment II) except the device being adapted for incorporation into the electrical appliance.

In the same field of endeavor, Devries et al. teaches the device being adapted for incorporation into the electrical appliance (Column 2 lines 28-33) for the benefit of reducing wire connection and ease of user installation.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the device being adapted for incorporation into the electrical appliance as shown in Devries et al., in Girismen device for the benefit of reducing wire connection and ease of user installation.

Consider claim 41, Girismen clearly shown and disclose the alarm device, in which the device is operable to store energy (relay coil 26) from the mains when connected thereto and to use the stored energy to provide (de-energized) the alarm signal for a limited time after interruption of the mains electrical supply (Embodiment II).

Consider claim 42 and 43, Girismen clearly shown and disclose the alarm device, characterized in that there are provided means for detecting an open-circuit (switch opens) condition of a monitored supply line (Column 3 lines 43-49).

Consider claim 44 and 45, Girismen clearly shown and disclose the alarm device, characterized in that it includes a delay timer for delaying operation of an output device triggering the alarm indication for a pre-determined delay period after detection thereof (Column 3 lines 18-21).

Consider claim 46, Girismen teaches similar invention except the alarm device, characterized in that the delay timer is adjustable.

In the same field of endeavor, Devries et al. teaches the alarm device, characterized in that the delay timer is adjustable (between 2 and 7 minutes) (Column 3 lines 48-49) for the benefit of user preference.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the delay timer is adjustable as shown in Devries et al., in Girismen device for the benefit of user preference.

Consider claim 47 and 48, Girismen clearly shown and disclose the alarm device, characterized in that said output device is a relay (21, Fig. 3).

Consider claim 49, Girismen clearly shown and disclose the alarm device, characterized in that it has a capacitor (55, Fig. 5) which is maintained charged when the supply is present and which is arranged to discharge when the supply is removed. Although in the prefer embodiment Girismen shows the battery (52, Fig. 5) and capacitor (55, Fig. 5) as an alternative power source for an alarm, it would have been obvious to one of ordinary skill in the art at the time of the invention to use well know energy storage device, which the selection of capacitor or battery are design choice for the particular application.

Consider claim 51, Girismen clearly shown and disclose the alarm device, characterized in that the said capacitor (55, Fig. 5) provides the power for an audible and/or visible alarm (42, Fig. 5) indicator upon the occurrence of an alarm condition.

Consider claim 53, Girismen teaches similar invention except the self-contained alarm device, characterized in that the alarm indicator device is supplied intermittently when a power failure is detected, whereby to give the alarm indication.

In the same field of endeavor, Devries et al. teaches the self-contained alarm device, characterized in that the alarm indicator device is supplied intermittently (once per second) when a power failure is detected, whereby to give the alarm indication (Column 3 lines 27-30) for the

benefit of providing the intermittent signal is more noticeable by the human ear than a continuous signal.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the alarm indicator device is supplied intermittently when a power failure is detected, whereby to give the alarm indication as shown in Devries et al., in Girismen device for the benefit of providing the intermittent signal is more noticeable by the human ear than a continuous signal.

14. Claims 50, 52, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) in view of Devries et al. (US Patent # 5,939,992), and further in view of Ida (US Patent # 4,346,371).

Consider claim 50, Girismen and Devries et al. combined references teaches similar invention except the alarm device, characterized in that the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element.

In the same field of endeavor, Ida teaches the alarm device, characterized in that the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element (8, 18, 20, 22, 23, or 26, Fig. 1) (Column 1 lines 56-64) for the benefit of well know common fail-safe circuit design for an alarm.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the open circuit condition is detected by sensing a reversal in the polarity of a voltage differential across a resistive element as shown in Ida, in Girismen and Devries et al. combined device for the benefit of well know common fail-safe circuit design for an alarm.

Consider claim 52, Girismen clearly shown and disclose the self-contained alarm device, characterized in that the said capacitor (55, Fig. 5) provides the power for an audible and/or visible alarm (42, Fig. 5) indicator upon the occurrence of an alarm condition.

Consider claim 55, Girismen and Devries et al. combined reference teaches similar invention except the alarm device, characterized in that a secondary output from the power supply is applied to the timer circuit to maintain it in a quiescent condition as long as the power is supplied to the circuit.

In the same field of endeavor, Ida teaches the self-contained alarm device, characterized in that a secondary output from the power supply is applied to the timer circuit (Column 2 lines 57-60) for the benefit of maintain the circuit in quiescent condition as long as the power is supplied to the circuit.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include an output from the power supply is applied to the timer circuit as shown in Ida, in Girismen and Devries et al. combined device for the benefit of maintain the circuit in a quiescent condition as long as the power is supplied to the circuit.

15. Claim 54 is rejected under 35 U.S.C. 103(a) as being unpatentable over Girismen (US Patent # 3,974,492) in view of Devries et al. (US Patent # 5,939,992) as applied to claim 53 above, and further in view of Goodchild (US Patent # 4,677,319 B1).

Consider claim 54, Girismen and Devries et al. combined reference teaches similar invention except the alarm device, characterized in that the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer.

In the same field of endeavor, Goodchild teaches the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer (Abstract) for the benefit of conserve the battery power.

Therefore it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include teaches the mark-to-space ratio of the alarm signal is determined by the ratio of the values of two series- connected resistors in the input circuit of a timer as shown in Goodchild, in Girismen and Devries et al. combined device for the benefit of conserve the battery power.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Miller et al. (US Patent # 0177625 A1) "Power interrupt system for a refrigerated appliance".

b. Hansen et al. (US Patent # 6,191,697) "Circuit continuity detection system and method".

c. Williamson (US Patent # 4,849,734) "Self-diagnostic circuit for alarm-system".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack K. Wang whose telephone number is 571-272-1938. The examiner can normally be reached on M-F 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Ortiz can be reached on 571-272-1206. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JKW/

/Angela Ortiz/

Supervisory Patent Examiner, Art Unit 4154